



Ecosystem Management Program BULLETIN



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ARMY NATURAL RESOURCE PROGRAM

CELEBRATES 10 YEARS. 2005 marks the 10th year anniversary of the Army's natural resource program. The program started in 1995 with a staff of four individuals hired as interns through ORISE. We currently have 24 full time contract staff through the Research Corporation of the University of Hawai'i (RCUH), 16 staff through the Center for Ecosystem Management on Military Lands (CEMML), and three full time government employees. From our very meager beginning we have developed into a highly skilled group of field scientists that is out there saving species from extinction!



Army Natural Resource staff in the 1990's and a *Cyanea suprema*

We now have a greenhouse on both O'ahu and the island of Hawai'i in which we propagate rare species for outplanting purposes. We have put in over 20 miles of fencing on the island of O'ahu alone. In addition, we are integral members of the Invasive Species Committees, the Watershed Management Partnerships, and rare plant recovery groups. We partner with the State of Hawai'i Department of Land and Natural Resources, the Board of Water Supply, the US Fish and Wildlife Service, and a variety of private landowners because we know that in order for conservation in Hawai'i to be successful, we must work as a team. Here's to another 10 years of successful natural resource management!



Army Natural Resource Staff in 2005 on the rim of Mākuā Valley

CULTURAL RESOURCES PROGRAM WINS THE DEPARTMENT OF THE ARMY AWARD.

U.S. Army Garrison, Hawai'i's Cultural Resources Management (CRM) program is setting the standard for the Army in its field. The CRM was recognized for its leading achievement, and awarded the 2004 Secretary of the Army Environmental Award for Cultural Resources Management, Installation Award Category. Dr. Laurie Lucking is the manager for CRM here and has worked in environmental and cultural protection and preservation for 30 years. The program deals with not only archaeological sites but with historical buildings as well.



Pteroglyph of a dog at Mākuā Military Reservation

A quarterly publication of the Environmental Division, Directorate of Public Works,
US Army Garrison, Hawai'i. For additional information, call Ms. Michelle Mansker at (808) 656-2878.

The CRM team is composed of seven contract archaeologists and four full time government employees, whose job is to manage all the archaeological, cultural, and historic resources on Army lands in Hawai'i. They are currently managing 901 archaeological sites on 108,000 acres of training lands on two islands, 795 historic buildings and structures within three National Historic Landmark Districts and two Historic Districts.

ARMY DISCOVERS A NEW POPULATION OF AN ENDANGERED *DUBAUTIA*.

On January 12, 2005, while conducting rare plant monitoring and surveying, Joby Rohrer and Seth Cato discovered a new population of *Dubautia herbstobatae* in Mākaha valley. This endangered plant is in the sun flower family (Asteraceae) and is known from cliff habitats in the Northern Waianae Mountains. Currently Mākua is the center of abundance for this taxon with approximately two thousand individuals.

Unfortunately, outside of Mākua Valley *D. herbstobatae* is extremely rare with only about six plants known before this year. This new population has thirty-seven plants that are accessible only by rope. In monitoring the population in June plants were seen fruiting and flowering. Seed was collected on this trip and deposited at the Lyon Arboretum's seed bank. This new site has great conservation potential and offers a good opportunity to work with this species outside of Mākua Valley.



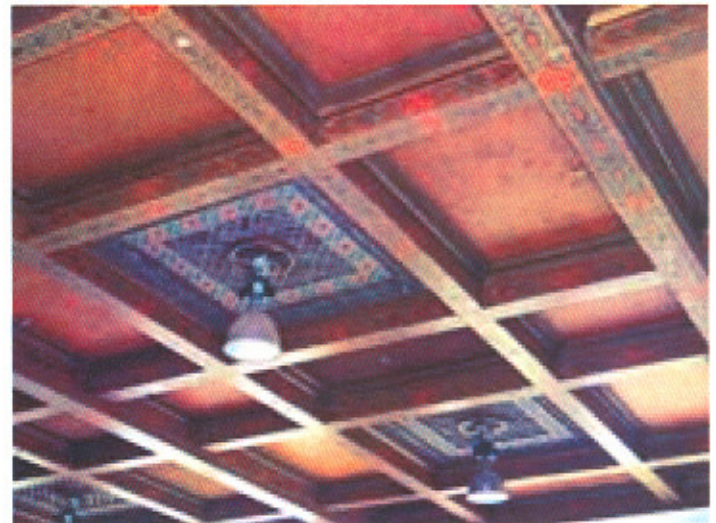
Dubautia herbstobatae in Mākaha valley

On June 21, 2005 Matt Keir and Vince Costello where monitoring a previously known *D. herbstobatae* population. The site was known to have five individuals that had been spotted from the bottom

of the cliffs. For the first time the team approached the site from above using ropes to access the area. This approach allowed them a new perspective on the area and they were able to identify fifteen new plants, tripling the number of known individuals from the area. The team commented that there are additional areas to search and they have high expectations for finding more plants.

F QUAD RENOVATION BRINGS HISTORIC THEATER INTO LIMELIGHT.

The F Quad Theater on Schofield Barracks is Italianate in style, designed after Italian villas with detailed ceilings and strong architectural features. The ceiling is a work of art with ornate stenciling and painting that was reserved for the finest theatres in the 1920s and 30s and was also a well documented treatment for the finest mansions in America and England, dating back to the 16th Century. Other impressive details of the theatre include the twisted columns that flank the stage and the hardwood flooring, which is original. The theater walls are scored to resemble masonry and retain their original sconces. Unfortunately, the theater has not been spared the ravages of time. Hope for restoring the old theater looms large because of its national historic merit.



Intricate detail located on the F-Quad Theatre ceiling

Kenneth Hayes, architectural historian with DPW, said the theater is significant in many ways. "When you look at all the details in the theater and put everything together, I think this is one of the most impressive buildings the Army has," Hayes said. "If this same theater were built today with the same techniques and materials, I would guess it would cost close to a half-million dollars to build." Hayes notes

that the theater was amazing for its time because it was constructed during the Great Depression.

The theater originally hosted live performances, movies and command briefings. In recent times, the theater doubled as a gym and briefing rooms.

ARMY INITIATES PREDATOR CONTROL EFFORTS FOR THREE SEPARATE POPULATIONS OF O'AHU 'ELEPAIO.

The native birds of Hawai'i evolved for millions of years without the threat of any mammalian predators. When the Hawaiians first arrived about 1000 years ago they brought with them the Polynesian rat, which is believed to have had a limited effect upon the bird populations at that time. When the Europeans arrived black rats and avian diseases came along with them, which have had significant impact upon the native forest bird populations. It has been well documented that the introduced black rat is a voracious predator of bird nests. Since these predators are nocturnal, both the egg or nestling and the adult female are directly threatened. Due to these threats and the loss of a large portion of their habitat, the population of O'ahu 'Elepaio has been splintered into six disjunct populations. These populations vary in size from several hundred to just a few individuals.



Rat pillaging an O'ahu 'Elepaio nest

For the seventh consecutive year the Army's Natural Resource Staff (NRS) initiated predator control efforts to eliminate rats from territories of the endangered 'Elepaio bird during the breeding season. This year was unique in that it was the first time that NRS expanded its efforts outside the Schofield

Barracks Training Area to The Nature Conservancy's Honouliuli Nature Preserve and the Board of Water Supply's Mākaha Valley. These control efforts were successful in protecting all of the known females in these areas and six fledglings were observed in Schofield Barracks West Range, two in Mākaha, and ten in Honouliuli.

O'AHU IMPLEMENTATION PLAN IS OUT FOR REVIEW!

The Draft O'ahu Implementation Plan (OIP) is out for review this July. The OIP was written by the DPW Environmental Natural Resources Staff to guide ongoing and future conservation efforts for the federally listed endangered species that occur on O'ahu Training Areas. These areas include: Schofield Barracks Military Reservation, Kahuku Training Area, Kawaihoa Training Area, Schofield Barracks East Range, South Range Acquisition Area, and Dillingham Military Reservation. The OIP is the result of the Army's formal consultation with the US Fish and Wildlife Service regarding potential threats to the federally listed endangered species in the O'ahu Training Areas. A similar conservation plan for Mākua Military Reservation called the Mākua Implementation Plan (MIP) was finalized in May 2003.

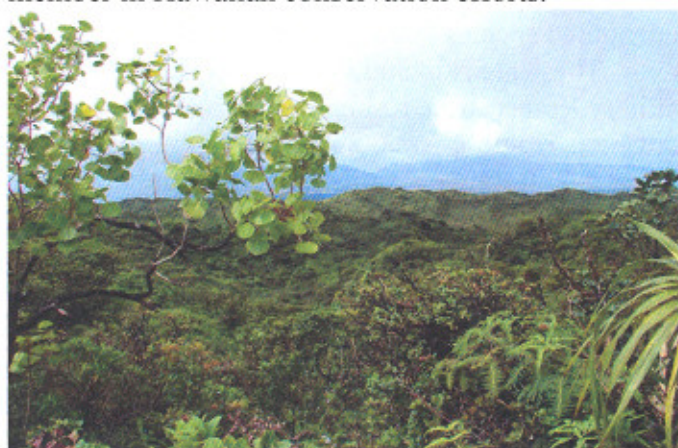


Achatinella byronii, kähuli tree snail

The OIP provides plans for the stabilization of endangered Hawaiian plants and animals found on Army training areas. Many of these rare species are only found on the Island of O'ahu and some have less than a handful of individuals left in the world. With the start of this plan these species will benefit from

the Army's commitment to conserving the endangered species found on training areas. This document provides the A total of 23 plants, 9 tree snails, and the O'ahu 'Elepaio. The stabilization of these endangered species will result in 69 stable rare plant populations, 24 stable snail populations and up to 75 breeding pairs of O'ahu 'Elepaio.

The successful implementation of the OIP ensures that the Army will be in compliance with the Endangered Species Act while still being able to accomplish its training missions. And through plans like this, the Army will continue to be an active member in Hawaiian conservation efforts.



View of Kawaihoa Training Area as seen from the Ko'olau summit.

DRAFT EIS FOR TRAINING IN MĀKUA VALLEY COMPLETED. The long-awaited Draft Environmental Impact Statement (DEIS) for training at Mākua Valley is currently available for public comment. Four different alternatives, one no-action alternative and three live-fire alternatives, are analyzed in the draft EIS. Each of the action alternatives would encompass training in Mākua Valley 242 days a year.

The deadline for public comments is September 20, 2005. Copies of the DEIS are available for review at the Hawai'i State Library and Wai'anae, Wahiawa, and Pearl City public libraries. The DEIS can also be reviewed at <http://www.makuaeis.com>. To obtain copies of the DEIS contact Gar Shirakata (438-0772) at the U.S. Army Corps of Engineers, Honolulu Engineer District, Building 230, Fort Shafter, HI 96858-5440, Makua-EIS@poh01.usace.army.mil. Three public hearings will be held August 23, 25, and 27, to receive public comments.



Endangered Loulu palms standing sentinel over Mākua Valley

DRAFT ENVIRONMENTAL ASSESSMENT FOR MĀKAHA FENCE COMING SOON. The Draft Environmental Assessment (DEA) for a fence proposed by the Army on Board of Water Supply lands in Mākaha will be available for public comment starting August 8th. The purpose of the fence is to protect a large-scale ecosystem and three smaller endangered species populations from the destructive impact of pigs and goats. The proposed large fence would encompass roughly 100 acres, while the three small fences would be constructed around populations of two endangered plant species. Additionally, the fence would help protect the watershed in the upper reaches of the Mākaha drainage.



View of area to be fenced in Mākaha Valley

The deadline for public comments is September 7, 2005. Copies of the DEA can be obtained from Dale Kanehisa, Environmental Division, Directorate of Public Works, US Army Garrison, Hawai'i, Schofield Barracks, HI 96857-5013, Fax: (808) 656-1039/Email: kanehisd@schofield.army.mil

LONGSTANDING TEAM MEMBER

PROMOTED: Jobriath Rohrer was recently promoted to the position of Senior Natural Resource Management Coordinator. Joby has been with the program since 1995 and most recently has served as a Natural Resource Management Coordinator. He served as a leader for one of the Army's two natural resource management teams that conducts daily field work to preserve O'ahu's rare species. Joby is currently a member of the Hawai'i Rare Plant Restoration Group and Wai'anae Feral Goat Management Team and has served in the past on the



Joby Rohrer beside a ma'o hau hele in Mākua Valley

Endangered Species Recovery Committee, as a volunteer with the O'ahu Genetic Safety Net Program, Hawai'i Conservation Conference Planning Committee, and as a field leader for the Miconia eradication effort. In his new capacity, he will serve as the leader of our Natural Resource Management Coordinators. We are proud of Joby's past accomplishment and dedication to natural resource protection in Hawai'i. Congratulations Joby!

RECRUITING FOR MĀKUA

IMPLEMENTATION PLAN COORDINATOR:

The O'ahu Army Natural Resource Program currently has a position open through the Research Corporation of the University of Hawai'i (RCUH) for coordinator

of the Mākua Implementation Plan. The job announcements can be accessed by visiting the RCUH web site at: <http://www.rcuh.com/> and selecting the link for employment and the link for job announcements. The job ID number is #025384. The employee will be responsible for all aspects concerning implementation of the Mākua Implementation Plan including: budget tracking, annual reporting, Environmental Assessment and Conservation District Use Application writing, revisions to the Implementation Plan, and developing project costs. The applicant must be able to work on a highly skilled and diverse team of natural resource managers and must be able to work with our State and Federal partners. The full description for the position can be found on the RCUH website. The job opened on August 1, 2005 and we will be accepting applications until someone is hired for the position.

Alan K. L. Goo
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